

PIEZOELECTRIC DEVICE FOR INJECTOR

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ABSTRACT OF THE DISCLOSURE

10 A piezoelectric device 1 for an injector, built into  
an injector and generating driving force of the injector,  
wherein a relation  $d(0.1E_c)/d(1.2E_c) \geq 0.50$  is  
established between an apparent piezoelectric constant  
 $d(1.2E_c)$  calculated from static elongation when an  
electric field of  $1.2 E_c$  is applied to the piezoelectric  
device in the same direction as a polarizing direction  
15 while a preset load of 500 N is applied to the  
piezoelectric device, and an apparent piezoelectric  
constant  $d(0.1E_c)$  calculated from static elongation when  
an electric field of  $0.1 E_c$  is applied to the  
piezoelectric device in the same direction as the  
20 polarizing direction. The piezoelectric device so  
fabricated has high durability and can be used for a long  
time. The piezoelectric device 1 is fabricated by  
alternately laminating a plurality of piezoelectric  
layers expanding and contracting in proportion to an  
25 applied voltage and a plurality of internal electrode  
layers for supplying the applied voltage, and the  
sectional shape of the piezoelectric device crossing at  
right angles the laminating direction is partially or  
wholly arcuate. The piezoelectric device 1 is  
30 accommodated in a cylindrical accommodation space.